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New and noteworthy bird records from Santa Catarina state, Brazil

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The avifauna of Santa Catarina was little known until 1978, when Helmut Sick was invited to prepare a bird inventory for the state. Previously, only scattered data existed, principally from collecting expeditions undertaken in the late nineteenth and early twentieth centuries (e.g. by Berlepsch, Kaempfer and Underdown). Several avifaunal lists have since been prepared for the state (Sick *et al.* 1979, 1981, Bege & Marterer 1991, Rosário 1996). Thus at present, Santa Catarina is, along with Rio Grande do Sul (Belton 1984, 1985, 1994), the only Brazilian state possessing a detailed distributional review of its avifauna.

The Santa Catarina avifauna originates principally from three different sources. Coastal and northern areas exhibit strong affinities with the highly endemic avifauna of the Serra do Mar (see Cracraft 1985). In the south of the state, typical pampas species, e.g. many waterbirds, Rallidae, Wren-like Rushbird *Phleocryptes melanops* and Many-coloured Rush-tyrant *Tachuris rubrigastra*, are the most obvious feature, and are similar to the avifauna of much of interior Rio Grande do Sul. Finally, Planalto taxa, including several *Araucaria* specialists and relict species that arrived during the last Cenozoic glaciations from the Andes and Patagonia (Sick 1985), are an important constituent of the avifauna of western Santa Catarina and the campos (grasslands) of the eastern serras.

Here, we present new and noteworthy avifaunal records for 37 species from the state, including 11 species not previously recorded in Santa Catarina, 12 species of conservation concern at either national or global levels, principally species considered

globally threatened or near-threatened (Collar *et al.* 1992, 1994), and 14 species for which fewer than three previous state records were available, or for which our records provide the southernmost ever. Details of other species for which few state records exist will be presented elsewhere (Naka *et al.* in press). We consider new species for the state to be those not mentioned by Sick *et al.* 1979, 1981), Bege & Marterer (1991) or Rosário (1996).

Most information comes from short trips during 1995–2000 by LNN and MAGA, except data gathered from Ilha de Santa Catarina which was visited more frequently (Naka 1998), and brief visits to the state made by JMB, GMK and JAT in January 1986, March 1994, October 1995, February and April 1997, October 1998 and July 2000.

Avifaunal surveys were undertaken in the following localities (see Fig. 1.), for which we present additional details and information concerning their conservation importance.

Reserva Particular do Patrimônio Natural de Volta Velha (c. 26°04'S 48°38'W). This privately owned 1,500 ha reserve is located in northeasternmost Santa Catarina, near Itapoá. The reserve protects one of the last remnants of lowland evergreen forest in the state. Some mature primary forest can be found here, as well as in the surrounding, but unprotected, area.

Ilha de Santa Catarina (27°10′–27°50′S 48°25′–48°35′W), Florianópolis municipality, is a 54 km-long and 18 km-wide island, separated from the mainland by a 500 m-wide

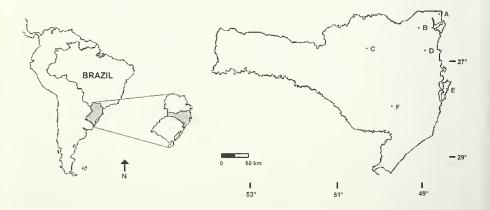


Figure 1. Map of Santa Catarina state showing the location of the six study localities mentioned in the text: A = Reserva Particular do Patrimônio Natural de Volta Velha; B = Salto do Piraí; C = Correia Pinto; D = Parque Botânico do Morro do Baú; E = Ilha de Santa Catarina; and F = Urubici and São Joaquim area. Inset: map of South America showing the position of Santa Catarina state within southern Brazil.

channel. Much of the island's vegetation has been modified by human activity, although it possesses some relatively well preserved Atlantic Forest, as well as patches of mangrove and restinga (coastal white-sand forests, up to 5 m tall, with many terrestrial bromeliads). See Naka & Rodrigues 2000 for more information.

Parque Botânico do Morro do Baú (26°47'–26°50'S 48°55'–48°57'W), Ilhota and Luís Alves municipalities. This protected area is composed of 750 ha of well-preserved montane and lower montane evergreen forest (at 200–820 m) (a full description of the area, as well as its avifauna, can be found in Marterer (1996).

Salto do Piraí (26°18'S48°50'W), near Joinville, is protected by the Estação Ecológica Estadual do Bracinho, which encompasses the waterfall and 400 ha of lower montane, montane and upper-montane evergreen forest. The reserve was created 50 years ago in order to protect the forest around the waterfall, and thus assure water for a small hydroelectric power station established to provide power locally (see Machado 1996 for more details of the avifauna of this area). We, and additional co-workers, will present elsewhere (Mazar Barnett *et al.* in press) details of the rediscovery and subsequent observations of Kaempfer's Tody-tyrant *Hemitriccus kaempferi* at this site in the period since 1991, as well as commenting on the exceptional conservation importance of the area.

Urubici and São Joaquim area (c. 27°59'S 49°39'W) is an area of mixed planalto woodland with a predominance of *Araucaria* and areas of dense bamboo undergrowth at 900–1,000 m. The main areas researched were in the outskirts of Urubici, but we also visited the neighbouring Morro da Igreja and the São Joaquim National Park which encompasses higher altitudes, to over 1,600 m, with *Araucaria* forests and campos de altitude (open grasslands).

Correia Pinto area (27°36'S 50°24'W) consists of a privately-owned plantation area near the town of Correia Pinto with large tracts of pines and *Eucalyptus* destined for paper and cellulose production. Between these tracts, there are patches of *Araucaria* forest with an interesting avifauna.

Most of our records are documented with tape-recordings or photographs and this is stated in the text. Tape-recordings have been deposited in LNS-CLO and ASEC-UFRJ (see below for abbreviations). Details of those records documented photographically are available from LNN. Sight records largely involved easily identified species, or those for which the authors' had extensive previous field experience. In a very small number of instances, we present details of the diagnostic characters used to determine sight or acoustic identifications.

Acronyms used: AMNH = American Museum of Natural History, New York; ASEC-UFRJ = Arquivo Sonoro Elias Coelho—Universidade Federal do Rio de Janeiro; CCNPII = Coleção do Colégio Pedro II, Blumenau; LNS-CLO = Library of Natural Sounds—Cornell Laboratory of Ornithology; MNRJ = Museu Nacional do Rio de Janeiro; MSCJ = Museu do Seminário Coração de Jesus, Corupá; UFSC = Universidade Federal de Santa Catarina.

New state records

GREY-LINED HAWK Buteo nitidus

During January 1986, a single bird was repeatedly seen in the outskirts of Canasvieiras, north of Florianópolis (JMB). The bird was encountered regularly on an exposed perch at the edge of a degraded woodlot close to habitation, and sometimes even in *Cecropia* trees in an adjacent clearing. There were no previous records in the state (Rosário 1996). This appears to be the southernmost locality in Brazil, where it was previously known to occur only as far south as São Paulo (Sick 1997), and represents a range extension of at least 250 km. It occurs in neighbouring Misiones, Argentina (Chebez 1996).

TURQUOISE-FRONTED PARROT Amazona aestiva

Three, subsequently up to nine birds, have been resident, and were tape-recorded, in the northern part of Ilha de Santa Catarina since August 1997 (LNN, MAGA). On one occasion, a pair was noted prospecting potential nest-holes in a Jerivá palm *Arecastrum romanzoffianum*. It is equally possible that these birds were escapes or natural colonists, as they have been noted at Porto Alegre, Rio Grande do Sul (J. Albuquerque, pers. comm.). *Amazona aestiva* and a number of other parrot species have established feral populations around Buenos Aires, Argentina (Chebez & Bertonatti 1991). This is the first confirmed state record; Rosário (1996) considered it unconfirmed, based on two undated specimens without locality, held in the CCNPII, Blumenau and MSCJ, Corupá. More significantly, Sick (1997) stated that this species only occurs away from the coast, although Bersato (paper presented at the Third Brazilian Ornithological Congress) has documented the species' regular presence in an urban area of Porto Alegre.

LESSER SWALLOW-TAILED SWIFT Panyptila cayennensis

One seen at Salto do Piraí on 4 October 1995 (JAT) is apparently the first state record, as the species was not included by Rosário (1996) and is the southernmost ever. In southeast Brazil, previously recorded south to São Paulo state (Sibley 1996, Sick 1997).

BAR-WINGED CINCLODES Cinclodes fuscus

One at Lagoa do Peri, Ilha de Santa Catarina, on 25 May 1996 (LNN). This is the northernmost record for the Atlantic coast of Brazil and the first state record. Confusion with its highland congener, Long-tailed Cinclodes *Cinclodes pabsti*, is highly improbable, as it does not migrate to the lowlands and is not known to overlap with *fuscus* (Belton 1984, Ridgely & Tudor 1994, Sick 1997). Nominate *C. f. fuscus* is a common migrant, a few reaching south Paraguay (Hayes *et al.* 1994), north-east

Argentina and extreme south Brazil, during the austral winter (Ridgely & Tudor 1994). All previous Brazilian records are from Rio Grande do Sul, where it is considered uncommon (Belton 1984, Sick 1997).

MARSH ANTWREN Stymphalornis acutirostris

A male was heard calling and seen in a very scrubby marsh at Volta Velha, Itapoá on 15 July 2000 (JMB, DB), within low-lying terrain that is probably seasonally inundated. Surrounding areas had been cleared for palmito plantations. The individual was tape-recorded and photographed. There were only a couple of tiny patches of *Typha* in this area, and the habitat was thus quite different from elsewhere within the restricted range, in the Paraná river basin. of this recently described species (Bornschein *et al.* 1995). Nearby, and just a few metres from the Paraná border (at 25°59'S 48°42'W), several of this species were found along the road from Garuva to Itapoá, in different patches of *Typha*. They were highly responsive to playback (LNN, MAGA, ALR and CAM). Marcos Bornschein & Bianca Reinert had already found the species in northernmost Santa Catarina, but their records are unpublished. Considered globally threatened (BirdLife International in press).

SLATY BRISTLEFRONT Merulaxis ater

One was heard at Urubici, on 11 February 1997 (GMK) and one was seen well and tape-recorded at Salto do Piraí, Joinville, at 240 m, on 29 October 1998 (MAE, GMK *et al.*). Songs from Santa Catarina appear to differ from those further north but, as noted by Ricardo Parrini and Bret Whitney (both *in litt.* 1999), the songs of those in the highlands of Rio de Janeiro further appear to differ from those on the lower slopes of the Serra do Mar, in São Paulo and Paraná. Our records are the southernmost ever and extend the known range by at least 240 km.

GREY-CAPPED TYRANNULET Phyllomyias griseocapilla

One at Salto do Piraí on 5 October 1995 (JAT) foraged in low trees and shrubs by a streamside path. This species was mentioned as hypothetical by Rosário (1996) but our record, which is mapped in Clay *et al.* (1998), appears to be the first specific locality for the species in the state.

GREY ELAENIA Myiopagis caniceps

At Salto do Piraí, one was singing on 4 October 1995 and a pair was seen on 5 October 1995 (JAT), relatively high in the canopy of forest-edge trees. At Volta Velha, Itapoá one on 15 July and a pair on 16 July 2000 were tape-recorded and, as usual, moved through the canopy but did not follow mixed-species flocks (JMB, DB). It was not listed for the state by Rosário (1996) and these appear to be the first records for Santa Catarina, although the species is known to occur in neighbouring Paraná and south to northeast and northwest Argentina (Ridgely & Tudor 1994, Scherer-Neto & Straube 1995).

WHITE-CRESTED ELAENIA Elaenia albiceps

One, on 9 April 1997, in an open, shrubby area adjacent to some houses just outside the reserve at Salto do Piraí (JMB). It was easily identified by the presence of a striking white centre to the crown, visible without the individual showing traces of agitation. It was probably an austral migrant of the *chilensis* population. Four specimens from Rio Grande do Sul were all taken in February and were presumed to be northbound migrants (Belton 1985). Marini & Cavalcanti (1990) suggested part of the population migrates north along the Brazilian coast, and the species is recorded annually in the coastal fringe of Rio de Janeiro in February–early April (Pacheco & Gonzaga 1994). The species can probably be expected on passage with some regularity throughout eastern Santa Catarina in early autumn.

SHORT-CRESTED FLYCATCHER Myiarchus ferox

One in mangroves at the Reserva Extrativista Marinha of Pirajubaé, Ilha de Santa Catarina, on 27 October 1997 (LNN) was extremely tame, uttering its diagnostic "prrrrt" call, unique among *Myiarchus*, which can be considered conclusive for identifying the species. This is the first state record: the species has not been recorded subsequently in the area, perhaps indicating that it was a migrant or wanderer.

EPAULET ORIOLE Icterus cayanensis

A pair, of the race *I. c. pyrrhopterus*, was seen on the edge of second-growth forest surrounded by pasture at Rio Vermelho, Ilha de Santa Catarina, on 16 March 1998 (LNN, MAGA). The rufous patches on the wings were seen clearly. This is the first state record, although its presence was expected as there are numerous records in Rio Grande do Sul (Belton 1985) and Paraná (Scherer Neto & Straube 1995), as well as neighbouring Argentina.

Species of conservation concern

YELLOW-LEGGED TINAMOU Crypturellus noctivagus

Several were heard and one tape-recorded at Volta Velha, Itapoá on 14–15 October 1998 (LNN, MAGA, ALR) and one was tape-recorded in undisturbed forest at the same locality on 15 July 2000 (JMB, DB). This threatened Brazilian endemic (Bernardes *et al.* 1990) occurs from Piauí and Pernambuco to Rio Grande do Sul (Pinto 1978). Few records are available for the nominate race, *C. n. noctivagns*, which occurs from southern Bahia to Rio Grande do Sul, and this taxon is apparently extinct in part of its range (Sick 1997). It is considered rare in the Atlantic Forest of Santa Catarina by Rosário (1996) with only two recent records, both in October 1978 (from Parque Botânico do Morro do Baú, Ilhota, and Reserva Biológica do Sassafrás, Doutor Pedrinho), and a 1959 specimen from Sombrio held in MSCJ.

PURPLE-WINGED GROUND-DOVE Claravis godefrida

One was flushed and three were heard and tape-recorded at Urubici, on 11 February 1997 (DBe, GMK, RM, RSRW). There was only one previous state record, from

Blumenau in the 19th century (Collar *et al.* 1992, Rosário 1996). Records involving more than one individual, even historically, are very few and it is therefore worth presenting here a previously unpublished record of a pair at Ubatuba, São Paulo, on 30 January 1997 (DBe, GMK, RM, RSRW). Considered globally threatened (Collar *et al.* 1992, 1994).

MOTTLED PICULET Picumnus nebulosus

One was seen at Urubici, at 975 m, on 11 February 1997 (DBe, RM, RSRW). On 15 April 1997, a female was found at the same locality, following a mixed-species flock (JMB). The bird remained feeding and resting for *c*. 10 minutes in an area of open mixed woodland with some *Araucaria* and dense bamboo undergrowth on a steep slope. It worked along small branches *c*. 7–8 m. above ground. After resting and preening for a while it flew downslope to rejoin the mixed flock. Another with a mixed-species flock at Urubici, at 1,400 m, on the Morro da Igreja trail, on 14 June 1998, foraged *c*. 1 m above the ground in scrub by the road (LNN). Only one state record has been published, at Lages, in January 1990 (Rosário 1996). This poorly known species is extensively distributed in northern Rio Grande do Sul (Belton 1984, Sick 1997), and has probably been overlooked in most adjacent areas of Santa Catarina. The species occurs in south-east Brazil north to Paraná, Uruguay and north-east Argentina in Misiones and Corrientes (Sibley 1996). Parker *et al.* (1996) did not record the species' occurrence above 1,100 m, making the June 1998 record a considerable upslope altitudinal range extension.

HELMETED WOODPECKER Dryocopus galeatus

Two were seen at Volta Velha, Itapoá, on 15 October 1998, when they flew over an open area as they apparently moved between forest patches (LNN, MAGA, ALR). They paused on a single small tree for c. 1 minute. After drumming a few times on the main trunk. c 1. m above ground, the birds departed for another area of undisturbed lowland evergreen forest. No modern state records (Rosário 1996), with the most recent occurrence being in 1946. This globally threatened species occurs from São Paulo south to Rio Grande do Sul states, in southeast Brazil, Misiones, in adjacent north-east Argentina, and in eastern Paraguay (Collar *et al.* 1992). It is also considered locally threatened in Brazil (Bernardes *et al.* 1990).

CANEBRAKE GROUNDCREEPER Clibanornis dendrocolaptoides

Two birds were tape-recorded at 975 m, in the vicinity of Urubici, on 11 February 1997 (DBe, GMK, RM, RSRW). A pair was observed and tape-recorded on 16 April 1997 near Urubici (JMB). The birds were in a dense bamboo stand within mixed upland forest containing sparse *Araucaria* trees, on a steep slope. Known from just one other locality in the state (Três Barras, in the extreme north); birds were first observed at Urubici, by Fernando Pacheco and Bret Whitney, in 1991 (Rosário 1996). Frank Lambert (*in litt.* 1999) found the species to be quite common around Urubici in November 1997. He saw or heard the species regularly on steep-sided slopes and

flatter ridges in areas of bamboo with rather open and an almost closed canopy in areas where *Araucaria* was either present or dominated the flora. There are several sections of habitat around Urubici that match this description, and it is conceivable that a significant population of *Clibanoruis* persists in this area. However, several places have, in the last few years, been converted to agricultural land or used for urban development and these threats are potentially significant. This is a poorly known and seldom recorded species. It was considered rare in Rio Grande do Sul (Belton 1984) but is apparently comparatively widespread in the eastern half of the planalto in that state (R. A. Dias pers. comm. 1999).

UNICOLORED ANTWREN Myrmotherula unicolor

Two on 3 October 1995, four on 4 October 1995 (JAT) and a solitary female and a female with an immature male on 9 April 1997 (JMB), all at Salto do Piraí. These last birds were associated with loose mixed flocks containing Spot-breasted Antvireo *Dysithamnus stictothorax* and several furnariids. Their calls were tape-recorded. One was seen at the same locality on 29 October 1998 (GMK *et al.*). On 18 July 2000, one was observed foraging in the mid-storey, within a mixed-species flock, at Volta Velha, Itapoá (LNN, CAM). The species is known from six sites in the state all in the Atlantic Forest region (Rosário 1996, Whitney & Pacheco 1995), including Salto do Piraí, where Emil Kaempfer took an adult female and young male in June 1929 (Naumburg 1939). Our sight records appear to be the first at this locality since then. Considered globally threatened (Collar *et al.* 1992, 1994).

SALVADORI'S ANTWREN Myrmotherula minor

Two at Salto do Piraí on 3 October 1995 (JAT), one of which was an adult male, were seen in lower elevational, streamside forest. It was not listed for Santa Catarina by Rosário (1996), although Whitney & Pacheco (1995) listed a specimen record from Hansa-Humboldt (= Corupá), making this sight record the second state occurrence. Considered globally threatened (Collar *et al.* 1992, 1994).

SÃO PAULO TYRANNULET Phylloscartes paulistus

At least three were seen at Urubici on 11 February 1997 (DBe, GMK, RM, RSRW) and, at Salto do Piraí, two were seen on 4 October 1995, outside the reserve in the forest edge within 100 m of the river (JAT) with one there on 29 October 1998 (GMK *et al.*). Two localities for the species are known in Santa Catarina: Salto do Piraí, where it was collected in June 1929 and from where there are sight records in July 1991, March 1992 (Wege & Long 1995) and February 1994, and Blumenau (Rosário 1996). Our sight records from Urubici are the southernmost ever in Brazil and extend the known range by *c*. 130 km. Considered globally threatened (Collar *et al.* 1992, 1994).

RESTINGA TYRANNULET Phylloscartes kronei

Five to seven individuals were encountered on 15 and 16 July 2000 at Volta Velha, Itapoá (JMB, DB), usually in pairs and sometimes following mixed-species flocks, in

lower and more open restinga, open areas and forest edge. Calls from several individuals were tape-recorded. They worked areas 1–4 m above ground in the outer third and canopies of low trees, perching on exposed branches. No wing-flicking was observed, but a strong wing-slurring was heard once and tape-recorded. Willis & Oniki (1992) mention a specimen from Santa Catarina in the description of this species, but the record was overlooked by Rosário (1996) and it is possible that some or most of the littoral records of Mottle-cheeked Tyrannulet *P. ventralis* mapped by Rosário (1996) actually refer to *kronei*. DB has also recorded the species at Tabuleiro, on the mainland adjacent to Ilha de Santa Catarina. The species has recently been discovered as far south as Rio Grande do Sul (Bencke *et al.* 2000), and can presumably be expected at other sites within Santa Catarina. Considered globally threatened (Collar *et al.* 1992, 1994).

BROWN TANAGER Orchestiscus abeillei

Several were seen in mixed-species flocks near Rio dos Cedros, near Blumenau, on 22 and 23 June 1998 (Denize A. Machado, LNN). Rosário (1996) listed just two previous state records, both in the extreme north; the new record provides a very slight (40 km) range extension southward. Considered near-threatened (Collar *et al.* 1994).

BLACK-BACKED TANAGER Tangara peruviana

Regularly recorded in the unprotected outskirts of the Carijós Ecological Reserve, in the north of Ilha de Santa Catarina since 1997, where it occupies mangrove, restinga and lowland evergreen forests (Naka & Rodrigues 2000). The species was also observed on 15 October 1998 and 17–18 July 2000 at Volta Velha, Itapoá. Given that Sick (1997) and Rosário (1996) considered it a polymorphic species, the recent view that two species are involved—*T. peruviana* and Chestnut-backed Tanager *T. preciosa* (see Sibley 1996 for rationale)—it is difficult to establish the status of *peruviana* within Santa Catarina. According to Collar *et al.* (1992), the only confirmed records for the state are those cited by Hellmayr (1936), who mentioned specimens taken at Joinville, Blumenau and Araranguá. As with Restinga Tyrannulet, many of the records mapped by Rosário (1996) in the littoral may refer to this species. Our records from Ilha de Santa Catarina represent the southernmost ever of this Brazilian endemic. Considered globally threatened (Collar *et al.* 1992, 1994).

BLACKISH-BLUE SEEDEATER Amaurospiza moesta

A single individual of this apparently rare and poorly known bamboo specialist was seen near Correia Pinto, on 9 May 1995 (LNN). It remained close to the ground in a small dense patch of bamboo, in second-growth *Araucaria* forest. Rosário (1996) knew of just two state records, both from the west of the state. The species is considered threatened in Brazil (Bernardes *et al.* 1990) and near-threatened globally (Collar *et al.* 1994).

Other significant state records

GREATER SHEARWATER Puffinus gravis

One was found dead on the north shore of Ilha de Santa Catarina, on Jurcrê International beach, on 19 December 1997 (LNN). The species appears periodically along Brazilian coasts during the pre- and post-breeding periods (Sick 1997). Rosário (1996) notes only two previous state records, in February 1979 and June 1987. However, there are several other specimen records from Ilha de Santa Catarina, all retained in the UFSC collection: two were collected by T. R. de Azevedo on Pântano do Sul beach in October 1986; two were collected by S. Weiss on Campeche beach in January and April 1987 (Azevedo & Schiefler 1991), and five others were collected on Galheta, Matadeiro and Joaquina beaches in June and September 1995, 1996 and 1997 (Ferreira 1997). The reasons for such 'wrecks' among seabirds in southeast Brazil are still poorly understood, but both disease and exceptional climatic conditions have been postulated (Martuscelli *et al.* 1997).

DARK-BILLED CUCKOO Coccyzus melacoryphus

Single individuals were seen on Ilha de Santa Catarina, on 20 December 1997 and 6 March 1998, in second-growth forest at Canasvieiras and in restinga at Naufragados (LNN, MAGA). These are the second and third state records; the first was at Lages in November 1991 (Rosário 1996). This species is a migrant in Rio Grande do Sul, with most records from 7 October–28 February (Belton 1984).

RUSTY-BARRED OWL Strix hylophila

Single individuals were tape-recorded at Costa de Dentro, in the southern part of Ilha de Santa Catarina, on 7 October 1997 and 4 April 1998 (LNN). Subsequently, there have been many other aural records from different localities on the same island (MAGA), and it appears to be the most common nocturnal owl there. There are only three other recent state records, all from the Atlantic Forest region (Rosário 1996).

NACUNDA NIGHTHAWK Podager nacunda

One was seen over the sandy beach at Lagoa do Peri, 1lha de Santa Catarina, on 25 April 1995 (LNN). Rosário (1996) listed just one recent state record, in January 1990, at São Joaquim. The species is a summer migrant to Rio Grande do Sul from 17 August–14 May (Belton 1984).

SCALED ANTBIRD Drymophila squamata

One was observed by the access road to Salto do Piraí on 9 April 1997 (JMB). On 22– 23 May 1998, several pairs were at Volta Velha, Itapoá (LNN, MAGA) and the species was subsequently discovered to be relatively common at this locality (JMB, DB, LNN). Bege & Marterer (1991) and Sick (1997) included it for Santa Catarina without details, although Rosário (1996) considered the species hypothetical in the state. The latter overlooked the ten specimens collected by Emil Kaempfer (held at AMNH), at Salto Pirahy and Palmital, in 1929 (Naumburg 1939). Our records are the first dated state records since then and thus confirm its presence in the southernmost part of its range (Ridgely & Tudor 1994), where it is presumably local in foothill and lowland forests in the north of the state.

OCHRE-RUMPED ANTBIRD Drymophila ochropyga

One was seen briefly and its distinctive calls heard on 16 April 1997 near Urubici (JMB), as it moved through a dense understorey of shrubs and *Chusquea* bamboo in degraded upland forest. It appeared to follow a mixed flock. There were only four previous records in the state, all from the Atlantic Forest region (Rosário 1996), and this is the southernmost record of the species.

STREAK-CAPPEDANTWREN Terenura maculata

Five heard and seen at Salto do Piraí, on 4 October 1995, were associating with mixedspecies canopy flocks within intact secondary forest (JAT), and one heard and seen at the same site. on 8 April 1997 (JMB), was also associating with a mixed-species flock. There are only two previous state records, Blumenau (Hellmayr 1924) and near Brusque in 1979 (Rosário 1996). It is probable that the species has been overlooked and is more widespread in Santa Catarina.

SOUTHERN BRISTLE-TYRANT Phylloscartes eximins

One was seen at Salto do Piraí, Joinville, on 29 October 1998 (GMK *et al.*). Only two localities are mentioned for Santa Catarina: Mondaí, where collected in July 1928, and São Pedro de Alcântara, based on a sight record in 1991 (Rosário 1996).

OUSTALET'S TYRANNULET Phylloscartes oustaleti

At Salto do Piraí, up to 14 birds were present on 4–5 October 1995 (JAT) and one on 29 October 1998 (GMK *et al.*). Rosário (1996) listed four previous records, two of them recent and two from the vicinity of Joinville. Our sightings confirm that the species is locally fairly common in the state's northern forests.

BROWN-BREASTED BAMBOO-TYRANT Hemitriccus obsoletus

One was mist-netted, tape-recorded and photographed on 7 May 1995 in secondgrowth *Araucaria* forest near Correia Pinto, in the south of the state (Denize A. Machado, LNN). Belton (1994) considered it fairly common in northern Rio Grande do Sul, but there are no recent records from Santa Catarina, being known in the state only from a specimen in MNRJ, taken in São Bento do Sul in 1928 (Rosário 1996).

EYE-RINGED TODY-TYRANT Hemitriccus orbitatus

One was seen in a patch of hillside forest on the outskirts of Joinville on 1 October 1995, and one was heard singing and observed closely at Salto do Piraí, on 5 October 1995, in riverside trees (JAT). Single individuals were seen at Volta Velha, Itapoá, on 22 April 1998 and 15 October 1998 (LNN). The first was accompanying a mixed-

species flock just below the canopy, whereas the second bird, which was taperecorded, was perched alone at *c*. 6–7 m above the ground. Subsequently, the species was observed and tape-recorded in undisturbed humid forest at the same locality in mid-July 2000, and was found to be common there (JMB, DB, LNN, MAGA, ALR, CAM). The species was considered fairly common in northern Rio Grande do Sul (Belton 1994), though there is only one previous record in Santa Catarina, at Morro do Baú (Rosário 1996). Nevertheless, *Idioptilon orbitatum* had been included, without further details, in a previous state list (Bege & Marterer 1991).

SULPHUR-RUMPED FLYCATCHER Myiobius barbatus

Six sightings, involving at least three birds at Salto do Piraí on 5 October 1995 (JAT) were in streamside secondary forest undergrowth. On 22 April 1998, one was observed foraging low down within a mixed-species flock at Volta Velha, Itapoá (LNN). These appear to be the second and third state records, the first being a specimen from Joinville in 1928 (Rosário 1996).

FLAME-CRESTED TANAGER Tachyphonus cristatus

Three on 8 April 1997 and two on 9 April 1997 at Salto do Piraí (JMB) were all with mixed-species flocks. A pair with one young being fed by the female was at Volta Velha, Itapoá, on 15 October 1998 (LNN, MAGA), and up to five were seen in this reserve on 15–18 July 2000 (JMB, DB, LNN, MAGA, ALR, CAM). These records represent the second to fourth state records (Rosário 1996) and the southernmost for the species.

BRAZILIAN TANAGER Rhamphocelus bresilins

Several were seen on 10 December 1997 on Ilha Campeche, off the east coast of Ilha de Santa Catarina. There are also records from Ilha de Santa Catarina, in October 1997 (ALR pers. comm.). These appear to be the southernmost records of the species. Its rarity in the state may be a consequence of the pet trade or it may be that it is naturally less common at the extremity of its range. Just three recent records, and all others with the exception of one, in 1936, at Camboriú, are from the northernmost part of the state, near the Paraná border.

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